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Symbol: TM-01

Group Ref: TMG-M29

This document consists of 6 pages

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June 3, 1952

MINUTES OF THE TWENTY-NINTH MEETING OF THE THEORETICAL MEGATON GROUP

28 May 1952

1. The twenty-ninth meeting of the TMG convened at 9:00 AM, Wednesday, 28 May 1952, in the W-Division Conference Room. Those present were:

G. Bell	R. M. Landshoff
H. A. Bethe	C. L. Longmire
A. A. Broyles	J. C. Mark, Chairman
J. W. Calkin	H. L. Mayer
C. Evans	N. Metropolis
F. Evans	L. W. Nordheim
B. E. Freeman	J. C. Potts
R. W. Goranson	F. Reines
G. M. Grover	M. Rosenbluth
M. G. Holloway	S. M. Ulam
F. C. Hoyt	G. M. Wing

E. J. Zadina

Topics

2. Status of Machine Calculations.

3. [redacted]

4. [redacted] DOE b(3)

5. Experiment to determine Mixing.

6. [redacted] DOE b(3)

2. Status of Machine Calculations.

The Matterhorn ignition burning calculation coded for UNIVAC is not yet completed.

The Alarm Clock calculation is being coded by Richtmyer and Nordheim for UNIVAC and will be run this summer.

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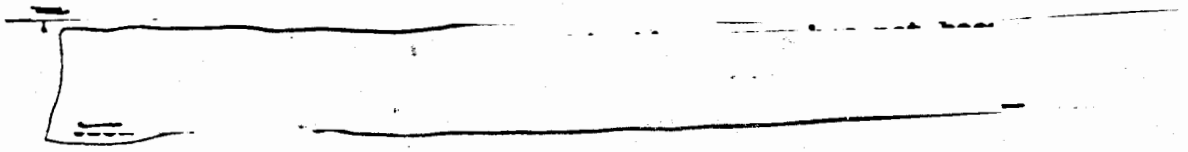
WD - family

Results from the A.C. explosion calculation for an initial assumed implosion are being analyzed.

DOE b(3)

Freeman and Broyles have completed three additional radiation flow calculations. For these calculations the following conditions were assumed:

DOE
b(3)



DOE
b(3)

It was decided to make one or two additional radiation flow runs as a basis for further implosion calculations. If a method for correcting the flux formula can be found then one calculation should be used for

comparison with previous results.

[redacted] DOE b(3)

5. Experiment to determine Mixing.

[redacted]

ons

DOE b(3)

The following set of conditions for a possible experiment were arrived at after the meeting, in a discussion with Bethe.

[redacted]

DOE b(3)

It was agreed that a considerably smaller amount of 14 mev neutrons would be observable. [redacted]

DOE b(3)

It seems questionable, however, whether such an experiment could be carried out in Nevada since it would seem to be difficult to design such a device which has the required high efficiency combined with a low total yield.

6. [redacted]

DOE b(3)

DOE b(3)

John Pasta is coding this problem for the CPCs and when experience is acquired it will presumably go on the MANIAC.

R. W. Goranson / P. P. Bartlett
R. W. Goranson

Distribution:

1A - H. H. Barschall
2A - G. Bell
3A - H. A. Bethe
4A - W. Bouricius
5A - N. E. Bradbury
6A - S. W. Burriss
7A - B. G. Carlson
8A - E. D. Cashwell
9A - F. de Hoffmann
10A - F. Evans
11A - B. E. Freeman
12A - D. K. Froman
13A - R. B. Gibney
14A - R. W. Goranson
15A - A. C. Graves
16A - L. E. Hightower
17A - M. G. Holloway
18A - F. C. Hoyt
19A - E. R. Jette
20A - R. M. Landshoff
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23A - J. C. Mark
24A - H. L. Mayer
25A - N. Metropolis
26A - L. W. Nordheim
27A - W. E. Ogle
28A - J. Pasta
29A - F. Reines
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31A - R. D. Richtmyer
32A - M. Rosenbluth
33A - R. W. Spence
34A - P. R. Stein
35A - E. Teller
36A - J. L. Tuck
37A - S. M. Ulam
38A - J. von Neumann
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